Ordering number: EN 4660A

SANYO

No. 4660A

2SA1883

PNP Epitaxial Planar Silicon Transistor

High-Speed Switching Applications

Features

- Fast switching speed.
- Low collector saturation voltage.
- High gain-bandwidth product.
- Small collector capacitance.
- Very small-sized package permitting 2SA1883-applied sets to be made small and slim.
- Complementary pair with the 2SC4987.

Absolute Maximum Ratings at Ta = 25°C

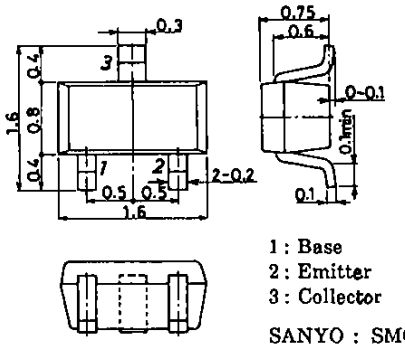
			unit
Collector to Base Voltage	V_{CBO}	−15	V
Collector to Emitter Voltage	V_{CEO}	−15	V
Emitter to Base Voltage	V_{EBO}	−5	A
Collector Current	I_C	−200	mA
Collector Current(Pulse)	I_{CP}	−500	mA
Base Current	I_B	−40	mA
Collector Dissipation	P_C	150	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB} = −8V, I_E = 0			−0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = −3V, I_C = 0			−0.1	μA
DC Current Gain	h_{FE}	V_{CE} = −1V, I_C = −10mA	50	80	140	
Gain-Bandwidth Product	f_T	V_{CE} = −10V, I_C = −10mA	450	1000		MHz
Output Capacitance	Cob	V_{CB} = −5V, f = 1MHz		1.8	3.0	pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C = −10mA, I_B = −1mA		−0.07	−0.20	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C = −10mA, I_B = −1mA		−0.80	−0.90	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C = −10μA, I_E = 0	−15			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C = −1mA, R_{BE} = ∞	−15			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E = −10μA, I_C = 0	−5			V
Turn-ON Time	t_{on}	See specified Test Circuit.		11		ns
Storage Time	t_{stg}	〃		21		ns
Turn-OFF Time	t_{off}	〃		19		ns

Marking : HA

Package Dimensions 2106A
(unit : mm)



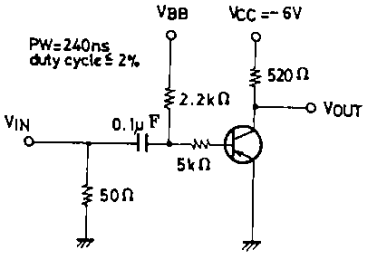
1 : Base
2 : Emitter
3 : Collector

SANYO : SMCP

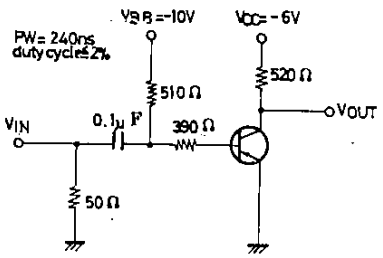
SANYO Electric Co.,Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

Switching Time Test Circuit

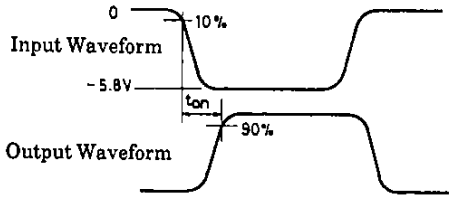
t_{on}, t_{off} Test Circuit



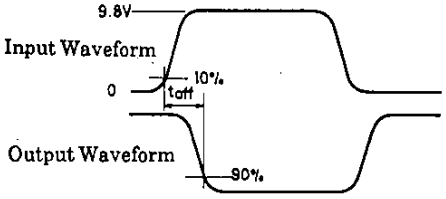
t_{stg} Test Circuit



t_{on} Test Waveform(V_{BB} = GND)



t_{off} Test Waveform(V_{BB} = −8.0V)



t_{stg} Test Waveform